

Enhance your  
efficiency

[www.avibit.com/solutions](http://www.avibit.com/solutions)

# OPTAMOS

## Key Features

- > Full A-SMGCS integration to improve taxi time calculations
- > OPTAMOS continuously compares stored taxi times with the actual flight progress of taxiing aircraft resulting in more precise results and higher reliability
- > Easy and intuitive handling: The information provided to an Air Traffic Controller controlling aircraft is reduced to an absolute minimum. As a result, controllers will quickly accept the transition away from legacy planning procedures
- > Reduced costs for transition training

## Benefits

- > Improved predictability for departure and arrival times
- > Reduced emission through the avoidance of Holding Point Queues and Holding Patterns
- > Integration with other systems enables easy data sharing
- > Enhanced capacity
- > Can be easily adapted to local procedures
- > Based on the experience and continuous cooperation with a large number of active Air Traffic Controllers from various sites, OPTAMOS is the number one tool for Air Traffic Controllers

## SAFECONTROL SUITE

ACEMAX  
DIFLIS  
INFOMAX

OPTAMOS  
DECLOS  
AIRMAX

# OPTAMOS

## ARRIVAL AND DEPARTURE MANAGEMENT SYSTEM

Optimise your Arrival  
and Departure Sequences

## Contact

AviBit Headquarters  
Herrgottwiesgasse 125  
8020 Graz, Austria

Phone: +43 316 429961  
Fax: +43 316 429961 38  
E-Mail: [office@avibit.com](mailto:office@avibit.com)

[www.avibit.com](http://www.avibit.com)



[www.avibit.com](http://www.avibit.com)

# OPTAMOS

## HOW DOES THE ARRIVAL AND DEPARTURE MANAGEMENT SYSTEM WORK?

### The Challenge

We have all learned that airports represent the bottlenecks for civil aviation. Even the most sophisticated ATC systems in combination with the most skilled Air Traffic Controllers alone will not be able to cope with future challenges. Additional runways are difficult to get authorised and built while demand continues to grow. Today we are not only looking at total capacity, other goals have to be met:

- > Integration into CDM systems
- > Reduced emissions from aircraft in holding patterns and runway holding queues
- > Maximum predictability in order to improve ground handling procedures and passenger streams
- > Reduction of fuel consumption
- > Improved efficiency in the allocation of staff and equipment

### The AviBit Solution

**OPTAMOS** – as a part of the SafeControl Suite ATM package – is comprised of two tools for accurate planning of Arrival and/or Departure streams. The most advanced algorithms combined with a clear HMI provide a user with accurate and easy to handle software support. OPTAMOS derives its name from its main task – the most optimized and economic traffic flow for Arrivals and Departures.



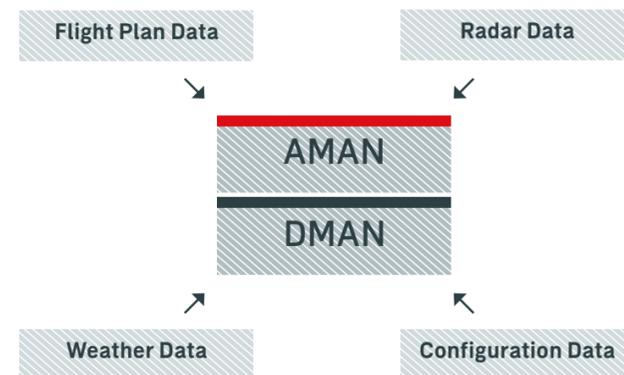
### The Concept

Calculations with numerous variables to predict/plan future traffic flows over the medium to long term are way to complex for human beings; computers can do this better and quicker. OPTAMOS takes over such calculations to plan and schedule Arrival and Departure traffic. OPTAMOS is available as a standalone solution for Arrival Management, Departure Management or as an integrated Arrival and Departure Management Solution.

Information sharing is another very important issue.

Gone are the times where ATC, Airlines and Airports all had their own data pool. OPTAMOS is ready to receive and disseminate data from and to various sources using whatever it gets to further improve its internal calculations. OPTAMOS integrates seamlessly with AODBs, stand allocation schemes, electronic flight strip systems (such as the advanced DIFLIS system) and many other systems to integrate fully into your local environment.

OPTAMOS – plan ahead for smooth air traffic flow



Radar Data	Flight Plan Data	Weather Data	Configuration Data
Current Aircraft Location Push-back and taxi-times statistics	Route, Aircraft Type Speed/Flight Level restrictions etc.	Trajectory customization according to weather conditions	Airspace map, TMA capacity Separation rules, Runway allocation rules, etc.
Current Aircraft Location Push-back and taxi-times statistics	Aircraft Type, WTC, Engine Type SID, TOBT	None	Airport map, pushback procedures, taxi preferences Runway allocation rules, etc.

## AN ADVANCED PLANNING TOOL

The most important feature are the algorithms used by the OPTAMOS itself. These are used to calculate:

- > TTL (time to loose)
- > TTG (time to gain)
- > Expected holding times for Arrivals
- > TSAT (Target Start Up Approval Time) for Departures



OPTAMOS is highly flexible. Runway changes, closures, even temporary closure of Taxiways can easily be taken into consideration for delivering precise TSATs. OPTAMOS can handle complex multisector TMAs with a high number of adjacent sectors as well as multiple airports within one TMA. OPTAMOS can even create Departure Slots for nearby airports offering functionality exceeding basic AMAN features.

OPTAMOS is also ready to cope with whatever local procedures you may have. A TOBT (Target Off Block Time) is available? The OPTAMOS uses it. If not, the EOBT will be used as a second option.

Unlimited Runway configurations can be entered for different time phases, all planned well ahead and easily changeable. SIDs are stored in the system's database and respected as are all local separation procedures and regulations.

### Safety Logic

During peak traffic hours, Air Traffic Controllers require assistance to avoid possible conflicts. OPTAMOS plays a vital role in increasing the safety level by creating smooth and predictable traffic streams.

### Total Flexibility

OPTAMOS will be tailored to meet and exceed your local requirements – this tailoring will be carried out together with your future users. Local habits and procedures will be reflected in the OPTAMOS suite and can be implemented in steps if required to ease the transition phase.

### Capacity Enhancement

By precisely calculating 4D trajectories for Arrivals and Departures and optimized arrival and departure sequences, OPTAMOS squeezes out every arrival/departure slot available as a result of which available capacity is maximised. In addition OPTAMOS eliminates the need to maintain a buffer, which is usually applied in order to prevent an overflow from occurring; with OPTAMOS there is no overflow. OPTAMOS guarantees a continuous flow of traffic – always close to the maximum capacity level.

